of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 22:09:10 ON 05 AUG 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 22:09:23 ON 05 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 AUG 2007 HIGHEST RN 944028-34-6
DICTIONARY FILE UPDATES: 3 AUG 2007 HIGHEST RN 944028-34-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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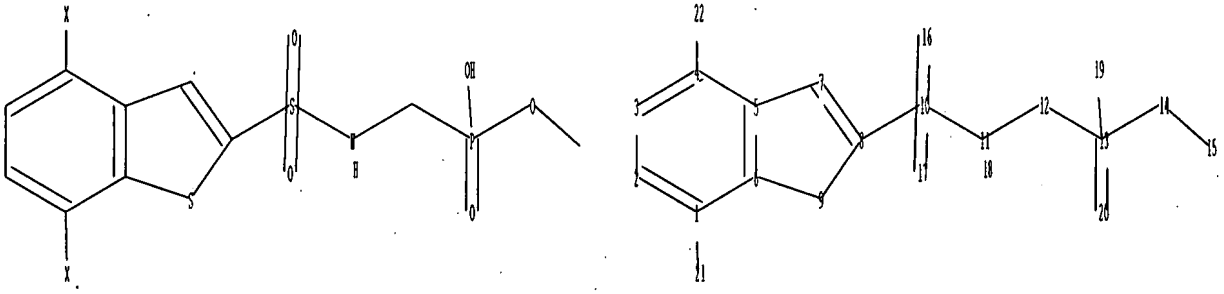

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ring bonds :
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exact/norm bonds :
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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
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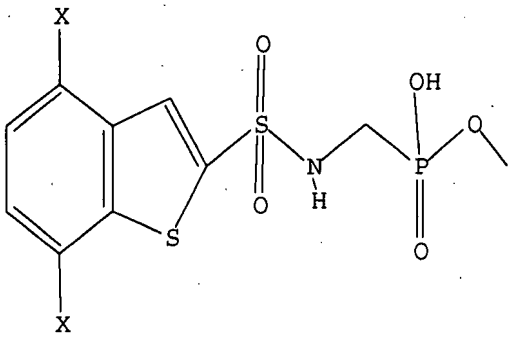

Structure attributes must be viewed using STN Express query preparation.

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FULL SCREEN SEARCH COMPLETED - 326 TO ITERATE

100.0% PROCESSED 326 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L2 1 SEA SSS FUL L1

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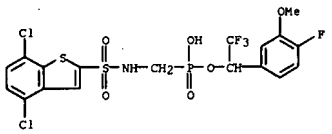
L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 657406-69-4 REGISTRY
ED Entered STN: 03 Mar 2004
CN Phosphonic acid, [[[(4,7-dichlorobenzo[b]thien-2-yl)sulfonyl]amino]methyl]-, mono[2,2,2-trifluoro-1-(4-fluoro-3-methoxyphenyl)ethyl] ester (9CI) (CA INDEX NAME)
MF C18 H14 Cl2 F4 N O6 P S2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                       174.50     174.71

FILE 'CAPLUS' ENTERED AT 22:10:35 ON 05 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 5 Aug 2007  VOL 147 ISS 7
FILE LAST UPDATED: 3 Aug 2007  (20070803/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

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L3            3 L2

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L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:464674 CAPLUS
DOCUMENT NUMBER: 144:488511
TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 131 pp., Cont.-in-part of U.S. Ser. No. 411,484.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006105999	A1	20060518	US 2005-535391	20050518
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2002-302124	A2	20021122
US 2003-411484	A2	20030408
WO 2003-US36929	W	20031119
US 1999-142362P	P	19990706
US 2000-610456	A2	20000705
US 2002-266213	A2	20021008

OTHER SOURCE(S): MARPAT 144:488511
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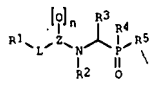
L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)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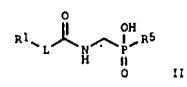
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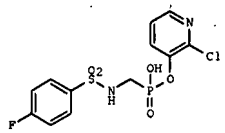
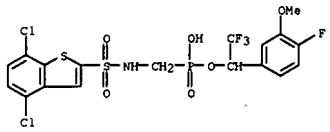

III

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, aralkyl, aryl; R3 = H, alkyl, cycloalkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] such as II [R1 = (un)substituted Ph or thien-2-yl; L = a bond, CH2O, CO, or C(:NOMe); R5 = halo, or OR10 (wherein R10 = (un)substituted Ph, pyridinyl, or quinolinyl)]; provided that when L = CH2O, R5 is not F or 4-NO2C6H4] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of III which showed IC50 of 622 μM against β-lactamase, was given.

IT 657406-69-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamidomethyl and carboxamidomethyl phosphonate β-lactamase inhibitors and their antibacterial use)

RN 657406-69-4 CAPLUS
CN Phosphonic acid, [[[(4,7-dichlorobenzo[b]thien-2-yl)sulfonyl]amino]methyl]-, mono[2,2,2-trifluoro-1-(4-fluoro-3-methoxyphenyl)ethyl] ester (9CI) (CA INDEX NAME)



L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:353142 CAPLUS
DOCUMENT NUMBER: 140:357200
TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 134 pp., Cont.-in-part of U.S. Pat. Appl. 2004 29,836.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
US 6472406	B1	20021029	US 2000-610456	20000705
US 2004059115	A1	20040325	US 2002-266213	20021008
US 7030103	B2	20060418		
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003295638	A1	20040618	AU 2003-295638	20031119
US 2006105999	A1	20060518	US 2005-535391	20050518

PRIORITY APPLN. INFO.:

US 1999-142362P	P	19990706
US 2000-610456	A2	20000705
US 2002-266213	A2	20021008
US 2002-302124	A2	20021122
US 2003-411484	A1	20030408
WO 2003-US36929	W	20031119

OTHER SOURCE(S): MARPAT 140:357200
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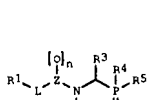
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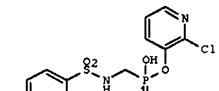

II

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, aralkyl, aryl; R3 = H, alkyl, cycloalkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of II which showed IC50 of 622 μM against β-lactamase, was given..

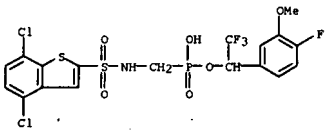
IT 657406-69-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamidomethyl and carboxamidomethyl phosphonate β-lactamase inhibitors and their antibacterial use)

RN 657406-69-4 CAPLUS

CN Phosphonic acid, [[[(4,7-dichlorobenzo[b]thien-2-yl)sulfonyl]amino]methyl]-, mono[2,2,2-trifluoro-1-(4-fluoro-3-methoxyphenyl)ethyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:120574 CAPLUS

DOCUMENT NUMBER: 140:181318

TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase

INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii

PATENT ASSIGNEE(S): Methylgene, Inc., Can.

SOURCE: U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 266,213.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
US 6472406	B1	20021029	US 2000-610456	20000705
US 2004059115	A1	20040325	US 2002-266213	20021008
US 7030103	B2	20060418		
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003295638	A1	20040618	AU 2003-295638	20031119
US 2005043276	A1	20050224	US 2004-884435	20040702
US 2006105999	A1	20060518	US 2005-535391	20050518
PRIORITY APPLN. INFO.:			US 1999-142362P	P 19990706
			US 2000-610456	A2 20000705
			US 2002-266213	A2 20021008
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OTHER SOURCE(S): MARPAT 140:181318

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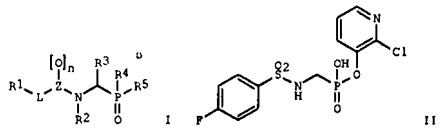


I II

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2 when Z = S; n = 1 when Z = C; n = 0 when Z = CH2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, etc.; R3 = H, alkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of II which showed IC50 of 622 μM against β-lactamase, was given.

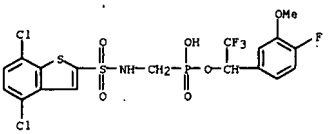
IT 657406-69-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamidomethyl and carboxamidomethyl phosphonate β-lactamase inhibitors and their antibacterial use)

RN 657406-69-4 CAPLUS

CN Phosphonic acid, [[[(4,7-dichlorobenzo[b]thien-2-yl)sulfonyl]amino]methyl]-, mono[2,2,2-trifluoro-1-(4-fluoro-3-methoxyphenyl)ethyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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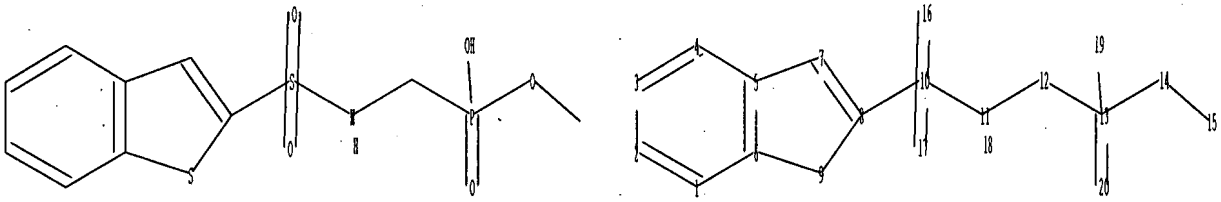

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ring bonds :
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exact bonds :
11-18 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 13-19 13-20

Match level :

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 22:23:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 326 TO ITERATE

100.0% PROCESSED 326 ITERATIONS 204 ANSWERS
SEARCH TIME: 00.00.01

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L6 4 L5

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L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:464674 CAPLUS
DOCUMENT NUMBER: 144:488511
TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 131 pp., Cont.-in-part of U.S. Ser. No. 411,484.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006105999	A1	20060518	US 2005-535391	20050518
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		

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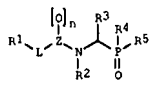
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2002-302124 A2 20021122
US 2003-411484 A2 20030408
WO 2003-US36929 W 20031119
US 1999-142362P P 19990706
US 2000-610456 A2 20000705
US 2002-266213 A2 20021008

OTHER SOURCE(S): MARPAT 144:488511
GI

L6 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)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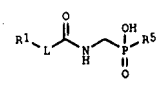
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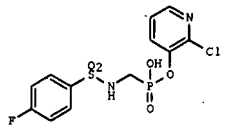

III

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, aralkyl, aryl; R3 = H, alkyl, cycloalkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] such as II [R1 = (un)substituted Ph or thien-2-yl; L = a bond, CH2O, CO, or C(:NOMe); R5 = halo, or OR10 (wherein R10 = (un)substituted Ph, pyridinyl, or quinolinyl); provided that when L = CH2O, R5 is not F or 4-NO2C6H4] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of III which showed IC50 of 622 μM against β-lactamase, was given.

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:353142 CAPLUS
DOCUMENT NUMBER: 140:357200
TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 134 pp., Cont.-in-part of U.S. Pat. Appl. 2004 29,836.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

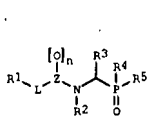
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
US 6472406	B1	20021029	US 2000-610456	20000705
US 2004059115	A1	20040325	US 2002-266213	20021008
US 7030103	B2	20060418		
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003295638	A1	20040618	AU 2003-295638	20031119
US 2006105999	A1	20060518	US 2005-535391	20050518

PRIORITY APPLN. INFO.:
US 1999-142362P P 19990706
US 2000-610456 A2 20000705
US 2002-266213 A2 20021008
US 2002-302124 A2 20021122
US 2003-411484 A1 20030408
WO 2003-US36929 W 20031119

OTHER SOURCE(S): MARPAT 140:357200
GI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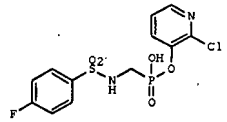
II

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, aralkyl, aryl; R3 = H, alkyl, cycloalkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of II which showed IC50 of 622 μM against β-lactamase, was given.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:120574 CAPLUS
DOCUMENT NUMBER: 140:181318
TITLE: Preparation of sulfonamidomethyl and carboxamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Rahil, Jubrail; Vaisburg, Arkadii
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 266,213.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004029836	A1	20040212	US 2002-302124	20021122
US 6884791	B2	20050426		
US 6472406	B1	20021029	US 2000-610456	20000705
US 2004059115	A1	20040325	US 2002-266213	20021008
US 7030103	B2	20060418		
US 2004082546	A1	20040429	US 2003-411484	20030408
US 6921756	B2	20050726		
WO 2004048393	A2	20040610	WO 2003-US36929	20031119
WO 2004048393	A3	20040819		
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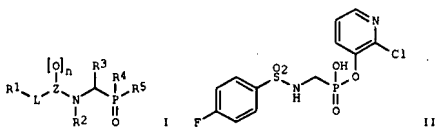
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003295638	A1	20040618	AU 2003-295638	20031119
US 2005043276	A1	20050224	US 2004-884435	20040702
US 2006105999	A1	20060518	US 2005-535391	20050518
PRIORITY APPLN. INFO.:			US 1999-142362P	P 19990706
			US 2000-610456	A2 20000705
			US 2002-266213	A2 20021008
			US 2002-302124	A2 20021122
			US 2003-411484	A1 20030408
			WO 2003-US36929	W 20031119

OTHER SOURCE(S): MARPAT 140:181318
GI



L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors I [R1 = (un)substituted (hetero)aryl; Z = C, CH2, S; n = 0-2 when Z = S; n = 1 when Z = C; n = 0 when Z = CH2; L = alkyl, alkoxy, CO, C(:NOMe); R2 = H, alkyl, cycloalkyl, etc.; R3 = H, alkyl, aryl, etc.; R4 = OH, F, SR7, N(R7)2; R5 = F, OR6, SR7, N(R7)2; R6 = H, alkyl, cycloalkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.; with the provisos] which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. I is described. E.g., a 4-step synthesis of sodium salt of II which showed IC50 of 622 μM against β-lactamase, was given.
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:31512 CAPLUS
DOCUMENT NUMBER: 134:95480
TITLE: Sulfonamidomethyl phosphonate inhibitors of β-lactamase
INVENTOR(S): Besterman, Jeffrey M.; Delorme, Daniel; Rahil, Jubrail
PATENT ASSIGNEE(S): Methylgene Inc., Can.
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002411	A1	20010111	WO 2000-US18344	20000705
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2377762	A1	20010111	CA 2000-2377762	20000705
EP 1194436	A1	20020410	EP 2000-943381	20000705
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JP 2003503505	T	20030128	JP 2001-507847	20000705
AU 770599	B2	20040226	AU 2000-57858	20000705
AT 311397	T	20051215	AT 2000-943381	20000705
ES 2250150	T3	20060416	ES 2000-943381	20000705
MX 2002PA00246	A	20030820	MX 2002-PA246	20020107
PRIORITY APPLN. INFO.:			US 1999-142362P	P 19990706
			WO 2000-US18344	W 20000705

OTHER SOURCE(S): MARPAT 134:95480
AB The intention relates to bacterial antibiotic resistance and, in particular, to compns. and methods for overcoming bacterial antibiotic resistance. The invention provides novel β-lactamase inhibitors which are structurally unrelated to the natural product and semi-synthetic β-lactamase inhibitors presently available and which do not require a β-lactam pharmacophore. The invention also provides pharmaceutical compns. and methods for inhibiting bacterial growth. Preparation of compds. is also described.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT